§ 77.1437 End attachment retermination.

Damaged or deteriorated wire rope shall be removed by cutoff and the rope reterminated where there is—

- (a) More than one broken wire at an attachment:
- (b) Improper installation of an attachment;
 - (c) Slippage at an attachment; or
- (d) Evidence of deterioration from corrosion at an attachment.

§ 77.1438 End attachment replacement.

Wire rope attachments shall be replaced when cracked, deformed, or excessively worn.

Subpart P—Auger Mining

§77.1500 Auger mining; planning.

Auger mining shall be planned and conducted by the operator to insure against any hazard to underground workings located at or near such auger operations and all auger holes shall be located so as to prevent:

- (a) The disruption of the ventilation system of any active underground mine:
- (b) Inundation hazards from surface water entering any active underground mine:
- (c) Damage to the roof and ribs of active underground workings; and
- (d) Intersection of auger holes with underground mine workings known to contain dangerous quantities of impounded water.

§ 77.1501 Auger mining; inspections.

(a) The face of all highwalls, to a distance of 25 feet on both sides of each drilling site, shall be inspected by a certified person before any augering operation is begun, and at least once during each coal producing shift and all loose material shall be removed from the drilling site before persons are permitted to enter the drilling area. The results of all such inspections shall be recorded daily in a book approved by the Secretary.

(b) In addition, the face of all highwalls, to a distance of 25 feet on both sides of each drilling site, shall be inspected frequently by a certified person during any auger operation con-

ducted either during or after a heavy rainfall or during any period of intermittent freezing and thawing and the results of such inspections shall be recorded as provided in paragraph (a) of this section

- (c) When an auger hole penetrates an abandoned or mined out area of an underground mine, tests for methane and oxygen deficiency shall be made at the collar of the hole by a qualified person using devices approved by the Secretary to determine if dangerous quantities of methane or oxygen-deficient air are present or being emitted. If such is found no further work shall be performed until the atmosphere has been made safe.
- (d) Tests for oxygen deficiency shall be conducted with a permissible flame safety lamp or other means approved by the Secretary and all tests for methane shall be conducted with a methane detector approved by the Secretary.
- (e) Internal combustion engines shall not be operated in the vicinity of any auger hole in which tests for methane or oxygen deficiency are being made.

§ 77.1502 Auger holes; restriction against entering.

No person shall be permitted to enter an auger hole except with the approval of the Coal Mine Health and Safety District Manager or Subdistrict Manager of the district in which the mine is located and under such conditions as may be prescribed by such managers.

§ 77.1503 Augering equipment; overhead protection.

- (a) Auger machines which are exposed to highwall hazards, together with all those parts of any coal elevating conveyors where persons are required to work during augering operations, shall be covered with heavy gage screen which does not obstruct the view of the highwall and is strong enough to prevent injuries to workmen from falling material.
- (b) No work shall be done under any overhang and, when a crew is engaged in connecting or disconnecting auger sections under a highwall, at least one person shall be assigned to observe the highwall for possible movement.